## Profiling the Leading Causes of Death in the United States

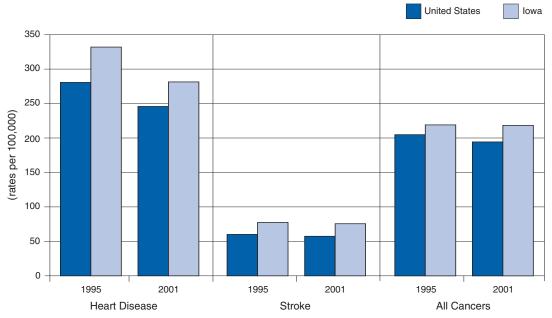
Heart Disease, Stroke, and Cancer



# **Chronic Diseases: The Leading Causes of Death**

### The Leading Causes of Death

United States and Iowa, 1995 and 2001



#### Source: National Center for Health Statistics, 2003

#### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

## **Reducing the Burden of Chronic Disease**

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.



## The Leading Causes of Death and Their Risk Factors

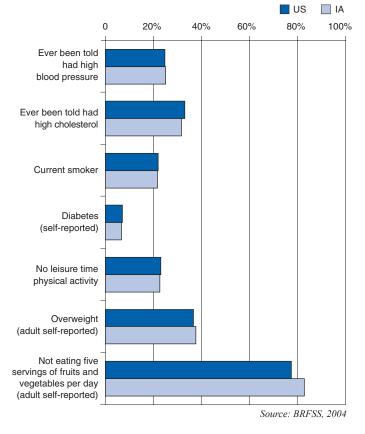
#### **Heart Disease and Stroke**

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Iowa, accounting for 8,250 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,218 deaths or 8% of the state's deaths in 2001.

#### **Prevention Opportunities**

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

#### Risk Factors for Heart Disease and Stroke, 2003



#### Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,570 are expected in Iowa. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 15,940 new cases that are likely to be diagnosed in Iowa.

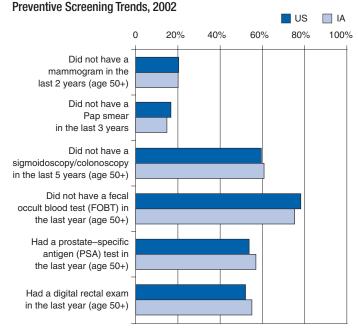
#### Estimated Cancer Deaths, 2004

Cause of death	US	IA
All Cancers	563,700	6,570
Breast (female)	40,110	430
Colorectal	56,730	710
Lung and Bronchus	160,440	1,680
Prostate	29,900	410

Source: American Cancer Society, 2004

#### **Prevention Opportunities**

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.









# **Iowa's Chronic Disease Program Accomplishments**

# **Examples of Iowa's Prevention Successes**

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (422.6 per 100,000 in 1990 versus 336.8 per 100,000 in 2000).
- A 20.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 40.4% in 1992 to 20.1% in 2002).
- Lower prevalence rates than corresponding national rates for self-reported diabetes (6.7% in Iowa versus 7.1% nationally) and for self-reported high cholesterol (31.7% in Iowa versus 33.1% nationally).

# **CDC's Chronic Disease Prevention and Health Promotion Programs**

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Iowa in the areas of cancer, heart disease, stroke, and related risk factors.

#### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Iowa, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS)  lowa BRFSS	\$116,017
National Program of Cancer Registries	\$0
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	\$0
Diabetes Control Program Iowa Diabetes Prevention and Control Program	\$243,170
National Breast and Cervical Cancer Early Detection Program Iowa Breast and Cervical Cancer Early Detection Program	\$3,052,191
National Comprehensive Cancer Control Program  The Face of Cancer in Iowa	\$401,500
WISEWOMAN Iowa Care for Yourself	\$1,094,956
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program Iowa Tobacco Prevention and Control Program	\$669,837
State Nutrition and Physical Activity/Obesity Prevention Program	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$5,577,671

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

#### **Additional Funding**

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Iowa that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.





## **Opportunities for Success**

## Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including heart disease and stroke, has been the leading cause of death in Iowa for the past 10 years, and in 2001 accounted for almost 38% of the state's total deaths. Between 1996 and 2000, the heart disease death rate was 493 per 100,000, and the stroke death rate between 1991 and 1998 was 119 per 100,000. While these death rates are lower than the national averages for these diseases (536 per 100,000 nationally for heart disease and 121 per 100,000 nationally for stroke), heart disease and stroke are largely preventable with behavioral modifications such as improved nutrition and physical activity. High blood pressure and smoking are also preventable risk factors for cardiovascular disease.

According to 2003 data from CDC's Behavioral Risk Factor Surveillance System (BRFSS), the percentage of adults in Iowa who reported participating in physical activities during a given month was slightly higher than the national rate (77.3% in Iowa versus 76.9% nationally). However, the percentage of Iowans who reported consuming 5 or more servings of fruits and vegetables per day was slightly lower than the national rate (17.1% in Iowa versus 22.5% nationally). In addition, the percentage of adults in Iowa who have been told that they have high blood pressure was slightly higher than the national rate (25.1% in Iowa, compared with 24.8% nationally); however, the percentage of smokers in Iowa was slightly lower than the national rate (21.7% in Iowa, compared with 22.0% nationally).

BRFSS data from 2003 indicate that based on body mass index, 37.7% of Iowans were overweight and 23.9% were obese—rates that are slightly higher than the national rates for overweight and obesity (36.7% and 22.8% respectively).

Iowa has established several programs to address the risk factors for CVD. One of these programs is the Iowa Diabetes Network, a statewide coalition of health care professionals, voluntary organizations, state governmental agencies, insurers, and other groups. The Network has established several educational opportunities and resources for local use, and works with health care providers to promote adherence to national standards of care for diabetes. Another program, "Lighten Up Iowa," is a 5-month competition that encourages Iowans to develop healthy activity and eating habits. This statewide program, which began in 2003, has had more than 20,000 participants.

### **Disparities in Health**

African Americans, who comprise approximately 12% of the U.S. population—about 35 million people—experience health disparities in significant proportions. African Americans have higher stroke mortality rates than other groups as well as a higher prevalence of the risk factors for heart disease. Compared with other racial and ethnic groups, African Americans are more likely to develop lung, cervical, colorectal, and prostate cancer at disproportionate levels.

The African American population in Iowa is about 61,000, making up approximately 2% of the state's population. The leading cause of death among African Americans in Iowa (and throughout the United States) is heart disease. From 1996 to 2001, the age-adjusted death rate for heart disease among African Americans in Iowa (633 per 100,000) was higher than the rate for whites (492 per 100,000). Between 1991 and 1998, African Americans in Iowa also experienced a higher stroke death rate than their white counterparts (162 per 100,000 versus 118 per 100,000).

In 2001, African American men in Iowa had higher incidence rates for prostate cancer than white men (198.9 per 100,000 compared with 148.3 per 100,000) and from 1997 to 2001, they had a prostate cancer death rate that was more than double the death rate for white men (79.6 per 100,000, compared with 31 per 100,000).

In Iowa, African Americans also suffer disproportionately from diabetes. The age-adjusted death rate for diabetes in 2001 was not only higher for Iowa's African Americans (74.3 per 100,000) than for whites (19.5 per 100,000); it was also higher than the national diabetes death rate for African Americans (49.1 per 100,000). The obesity rate for African Americans in Iowa in 2003 (39.6%) was also higher than the rate for whites (23.8%). Consequently, in Iowa the percentage of risk for health problems related to being overweight is greater for African Americans (67.9%) than for whites (62.0%).

#### **Other Disparities**

- Lung Cancer: In 2000, African American men had a higher lung cancer death rate (114.9 per 100,000) than white men (76.7 per 100,000).
- **Smoking:** Hispanics in Iowa are more likely to smoke (24.8%) than whites (22.9%). Insufficient data were available to compare the rate of smoking for African Americans.

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